

ABSTRACT OF THE DISCLOSURE

In a data transmission system, and a method for transmitting data in the gigabit/second range, data are transferred from a source located on a rotary part to a stationary part via a slip ring system. A first gigabit data link proceeds from the source at the rotary part to a rotary module of the slip ring system, from which the data are transferred to a stationary module of the slip ring system. From the stationary module of the slip ring system, the data are transferred via a second data link to a receiver. Each of the rotary module and the stationary module of the slip ring system has a clock regenerator. The clock regenerators are operated to synchronize the gigabit/second data, proceeding from the first data link and proceeding to the second data link, to a stable reference clock, so as to prevent jitter from proceeding from the source to the receiver.